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Sent: Friday, February 11, 2005 11:24 AM
To: info@apcd.org
Subject: Comments by Wilma Subra on Draft 2 of the STAR Program

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Jonathan Trout, Secretary/Treasurer
Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-7145

Re: Draft 2 Strategic Toxic Air Reduction (STAR) Program

Dear Mr. Trout:

Subra Company supports the STAR Program and encourages the Air Pollution Control Board to immediately approve the Proposed Regulations as presented in Draft 2.

Immediate approval and implementation of the STAR Program is essential in order to protect the health of Louisville residents especially those living in the West Louisville area where the Rubbertown industrial facilities are located.

The adoption and implementation of the STAR program are absolutely essential due to the fact that Louisville residents have some of the greatest exposure risks to airborne toxic chemicals of any of the communities in the Southwest United States. The air in West Louisville has been documented to contain 18 toxic chemicals in excess of Health Risk Goals based on data from the time period 2000 to 2002. **During 2002, 2003 and 2004 the concentrations of the toxic chemicals in the air in West Louisville have increased in spite of the hugh amount of public attention focused on the toxics air situation.**

The West Jefferson County Community Task Force collects air samples in the West Louisville area once every 12 days over a 24-hour period. The samples are collected from 5 monitoring stations and one control location. The monitoring stations consist of three fenceline locations: Louisville Police Firearms Training Center on Algonquin Parkway, Ralph Avenue/Camp Ground Road at the intersection of Ralph Avenue and Camp Ground Road, and Chickasaw Park on Algonquin Parkway. The two neighborhood stations are the Cane Run Elementary School on Cane Run Road and Farnsley Middle School on Lees Lane. The control location is located at the University of Louisville Campus on Shelbyville Road.

During 2003, 30 air sampling events occurred at the five monitoring stations and the control location. All 30 of the sampling events had elevated values of one or more chemicals at one or more of the monitoring stations.

During 2004, 28 sampling events were performed through December 11, 2004. Of the 28 sampling events, 27 events had elevated values of one or more chemicals at one or more locations. The January 10, 2004 event was the only event without elevated chemical levels in the air.

1,3-Butadiene

The chemical 1,3-Butadiene is a probable human cancer causing agent and is one of the 18 STAR Program toxic chemicals proven to exceed the health risk goal. The chemical is released into the air by American Synthetic Rubber (101,100 pounds in 2002), Zeon Chemical (22,587 pounds in 2002) and Rohm and Haas (5,500 pounds in 2002). The Ralph Avenue monitoring station detects the highest concentrations of 1,3-Butadiene. In 2000 and 2001 the Ralph Avenue station averaged less than 2 ppb 1,3-Butadiene on an annual basis. **During 2002 through 2004 the station averaged 5 to 6 ppb 1,3-Butadiene. This resulted in more than a 3 fold increase in the ambient air concentration at the Ralph Ave. station from 2000 and 2001 to 2002 through 2004.** During the year 2004, the highest concentration of 1,3-Butadiene detected at the Ralph Avenue station occurred on December 11, 2004 (12.39 ppb), just following the comment period on the proposed STAR regulations.

On November 29, 2004, the Louisville Metro Air Pollution Control District released their Benchmark Ambient Concentrations for the Category 1 and 1A Toxic Air Contaminants covered by the STAR program. The Chronic NonCancer Risk Benchmark Ambient Concentration for 1,3-Butadiene over a 24 hour period is 0.92 ppb. **The 1,3-Butadiene concentrations at the Ralph Avenue station exceeded the Chronic NonCancer Risk Benchmark Ambient Concentration of 0.92 ppb during 11 of the 28 sampling events in 2004. The Exceedences occurred during 9 of the 12 months of 2004 - January, February, April, June, July, and September through December of 2004. The exceedences were as high as 13.5 times the Benchmark Ambient Concentration.**

The Firearms Training Center monitoring station had average concentrations of 1,3-Butadiene in 2000 and 2001 of 0.5 to 0.78 ppb. From 2002 through 2004 the values increased to 2 to 3.6 ppb. This represents a 4 to 5 fold increase in 1,3-butadiene from 2000 and 2001 to 2002 through 2004. During the year 2004, the highest concentration of 1,3-Butadiene at the Firearms Training Center occurred on November 17, 2004, 5.28 ppb. The 1,3-Butadiene concentrations exceeded the Chronic NonCancer Risk Benchmark Ambient concentration of 0.92 ppb by as much as 5.7 times during 5 of the 12 months of 2004 - April through July and November 2004.

The Chickasaw Park station had average concentrations of 1,3-Butadiene in 2000 and 2001 of 0.76 to 0.9 ppb. From 2002 through 2004 the values increased to 1.3 to 2.6 ppb, a 1.7 to 2.9 fold increase. The highest concentration of 1,3-Butadiene at the Chickasaw Park station in 2004 was detected on November 17, 2004, 3.23 ppb, the same date as the highest concentration at the

Firearms Training Center. The 1,3-Butadiene concentrations exceeded the Chronic NonCancer Risk Benchmark Ambient concentration of 0.92 ppb by as much as 3.5 times during 5 of the months of 2004 - April through June, August and November, 2004.

Similar increases in concentrations from 2002 and 2001 to 2002 through 2004 occurred at Cane Rune Elementary School monitoring station and Farnsley Middle School location. The Risk Benchmark Ambient concentration was exceeded during 4 months at the Cane Run location and during 2 months at the Farnsley location.

The air concentrations of 1,3-Butadiene exceed the Benchmark Ambient Air Chronic NonCancer Concentration during 2004 out to a distance of more than 1.5 miles from the industrial facilities that release the chemical.

Chloroprene

Chloroprene is a possible human cancer causing agent and is one of the 18 STAR Program chemicals proven to exceed the health risk goal. Chloroprene is released into the air by DuPont Dow Elastomer. In 2002 the facility released a total of 520,759 pounds of Chloroprene into the air, 46,348 pounds from fugitive sources and 474,411 pounds from stack sources. The Chronic NonCancer Risk Benchmark Ambient concentration for Chloroprene is 0.28 ppb over a 24 hour period. **The Ralph Avenue station exceeded the Benchmark Ambient concentration during 16 of the 28 sampling events in 2004. Exceedences of the Benchmark Ambient concentration occurred during 8 month of the year 2004. The highest Chloroprene value occurred on June 26, 2004 - 15.62 ppb, 56 times the Benchmark Concentration.**

The Firearms Training Center exceeded the Benchmark Ambient concentration 11 of the 28 sampling events in 2004. Exceedences occurred during 8 of the 12 months of 2004. Chloroprene in the air was the highest at the Firearms Training Center station on May 9, 2004 -7.58 ppb, 27 times greater than the Benchmark Ambient concentration.

The Cane Run Elementary School location exceeded the Benchmark Ambient air concentration on 7 of the 28 sampling events. Exceedences occurred during 6 of the 12 months of 2004. Chickasaw Park monitoring station exceeded the Benchmark Ambient concentration during 5 of the 28 sampling events with exceedences occurring during 5 of the 12 months of 2004.

Chloroprene was present in the ambient air of West Louisville in concentrations in excess of the Benchmark Ambient Air Chronic NonCancer Risk concentration more than 1.5 miles from the industrial source facility during 2004.

The above presentation of data are just a few examples of the increases in ambient air concentrations over time, the wide spread areas impacted by the toxic air pollutants and the exceedences of Ambient air standards that have and are continuing to occur in the West Louisville area. The data has also demonstrated the occurrence of 10 to 15 chemicals in elevated levels at individual stations. For Example, in November 2004 the Firearms Training Center monitoring station detected elevated levels of the chemicals 1,2-Butadiene, Acrylonitrile, Chloroprene, Ethylbenzene, Hexane, m & p Xylene, MEK, Methyl Methacrylate,

Methylcyclohexane and Toluene. The occurrence of multiple chemicals at elevated levels in the air results in cumulative and synergistic health impacts over and above the health impacts associated with individual chemicals.

Based on the air monitoring data, it is extremely important that the Air Pollution Control Board immediately approve the proposed STAR regulations and enable the District to begin timely implementation of the regulations. The District did a wonderful job of responding to the comments submitted during the first comment period and maintained the integrity of the program. The emphasis on protection of human health rang true throughout the responses. I would like to commend the district for their approach and concerns. As the District moves forward with implementation of the regulations, it is important to establish an aggressive enforcement strategy to insure adequate and complete implementation by the industrial facilities and businesses that will result in the reduction in ambient concentrations of toxic chemicals in the air and improved community health and quality of life.

Once again, I support the STAR proposed regulations and request the Board move to approve the proposed regulations and enable the District to implement the program. Thank you for the opportunity to provide comments on the proposed regulations and participate in the regulatory process. The health of the community of Louisville is dependent on the implementation of the STAR program.

Sincerely,

Wilma Subra